Washington State Department of Health

Protocol for Newborn Hearing Screening

It is recommended that all infants be screened for hearing loss prior to one month of age according to the following protocol. This protocol was developed by a workgroup comprised of audiologists practicing in Washington and nursing staff from hospitals across Washington State. This protocol also includes guidance set forth by the Joint Committee on Infant Hearing (JCIH).

The purpose of a screening test is to identify those infants at risk for hearing loss who need further testing. A screening test is not a diagnosis.

A maximum of two screening tests, each consisting of a maximum of two attempts, should be performed.

1. Initial Hearing Screening

- The inital screening should be performed using Evoked Otoacoustic Emissions (EOAE, OAE, TEOAE, DPOAE) or Auditory Brainstem Response (ABR, AABR, BAER, ABAER).
- The initial screening should be performed as close to discharge as possible, preferably 12 hours or more after birth. The screening may be performed sooner if needed; however a higher referral rate may occur due to residual birthing debris in the ear canal.
- Both ears shall be screened individually.
- The initial screening shall consist of two attempts maximum on each ear.
- It is recommended but not required that an infant be referred for a rescreen (step 2) if s/he does not pass the initial screening or results cannot be obtained in one or both ears. (If second screening is not utilized, then a referral to diagnostic evaluation is appropriate. Skip to step 3.)

The hearing screening should be performed using Evoked Otoacoustic Emissions (EOAE, OAE, TEOAE, DPOAE), Auditory Brainstem Response (ABR, AABR, BAER, ABAER), or a combination of both measures.

The initial hearing screening:
Is the first hearing screening performed on an infant after birth. It should consist of no more than two attempts using the same screening technique on each ear.

2. Re-screening

- The rescreening shall be performed using Evoked Otoacoustic Emissions (EOAE, OAE, TEOAE, DPOAE), or Auditory Brainstem Response, (ABR, AABR, BAER, ABAER) or a combination of both measures.
- It is recommended that the rescreening be performed after discharge. The rescreening should occur prior to one month of age.
- Both ears shall be screened individually.
- The rescreening shall consisto of two attempts maximum on each ear at the time of screening.
- If an infant does not pass the re-screening or if results cannot be obtained in one or both ears, s/he shall be referred for diagnostic audiological evaluation.

The rescreening:
Is a second hearing screening that can be performed in an infant does not pass the initial hearing screening in one or both ears. It should consist of no more than two attempts on each ear, and can be performed prior to or after discharge. It is ideal to perform the rescreening after discharge to allow sufficient time for the infant's ears to clear of residual birthing debris. The rescreening should be performed prior to one month of age.

3. Referrals for Diagnostic Audiological Evaluation

- An infant shall be referred for a diagnostic audiological evaluation after failure to pass a maximum of two hearing screenings.
- The diagnostic evaluation shall be performed by an audiologist trained in infant diagnostic audiological evaluation as stipulated by the Washington State Department of Health Diagnostic Audiology Best Practice Guidelines. [1]
- The referral for diagnostic evaluation may be coordinated by the infant's primary care physician.
- The diagnostic evaluation should occur prior to three months of age.

4. Documentation and Communication of Screening Results

- Screening results shall be recorded in the infant's medical record.
- Screening results shall be communicated to the parents of the infant verbally and in writing.
- Screening results shall be communicated to the infant's primary care physician in writing.
- Screening results shall be reported to the Department of Health per stated protocol.
- Parents should be given written information to take home about risk factors for hearing loss and normal language development.

5. Quality Assurance

- A referral rate no higher than 8% for the initial screening should be maintained within three months of program initiation.
- If a rescreening prior to discharge is utilized, a referral rate no higher than 4% should be maintained within three months of program initiation.
- Within six months of program initiation, a minimum of 95% of infants should be screened prior to discharge or before one month of age.
- A tracking system should be in place to monitor referral rates and follow-up on those infants referred for a rescreening or diagnostic evaluation.
- Free technical assistance in newborn hearing screening program planning and development can be obtained from Children's Hospital & Regional Medical Center Newborn Hearing Screening Project Team.[2]

6. Screener Requirements

- Screeners should have adequate skills in soothing and calming newborns.
- Screeners should be trained by an audiologist or by a similarly trained individual in screening techniques.
- Screeners should be trained in sensitive communication of screening results. It is recommended to laminate examples of proper terminology and language and keep with screening equipment for screeners to reference.
- Screeners should be equipped to handle parent questions and know where to refer if unable to answer questions.

[1] To obtain a copy of the Diagnostic Audiology Best Practice Guidelines, contact:

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Washington State Department of Health
Genetic Services Section
20435 72nd Ave S, Suite 200
MS: K17-8
Kent, WA 98032

Phone: 253-395-6729
Fax: 253-395-6737
email: nancy.dalrymple@doh.wa.gov

[2] For free technical assistance in newborn hearing screening program planning and development, contact:

Children's Hospital & Regional Medical Center
Universal Newborn Hearing Screening Project
4800 Sandpoint Way NE, CH-78
Seattle, WA 98105

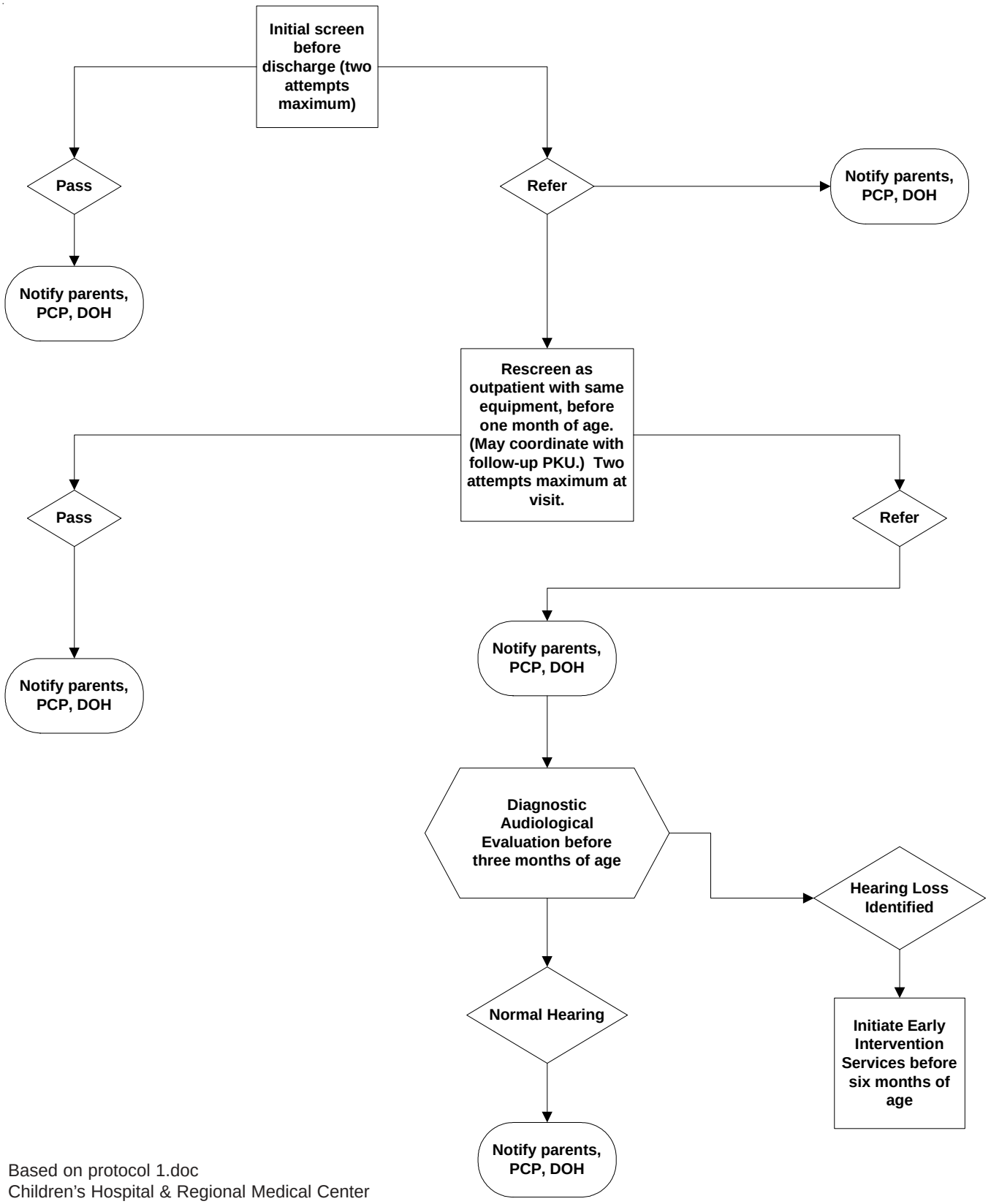
Phone: 888-365-7767
Fax: 206-528-2686
email: UNHS@chmc.org

Funding provided by Maternal and Child Health Bureau (MCHB), Health Resources and Services Administrations (HRSA) and the Northwest Lions Foundation for Sight and Hearing
Lions Early Assessment Program (LEAP)

Revision 4/2004

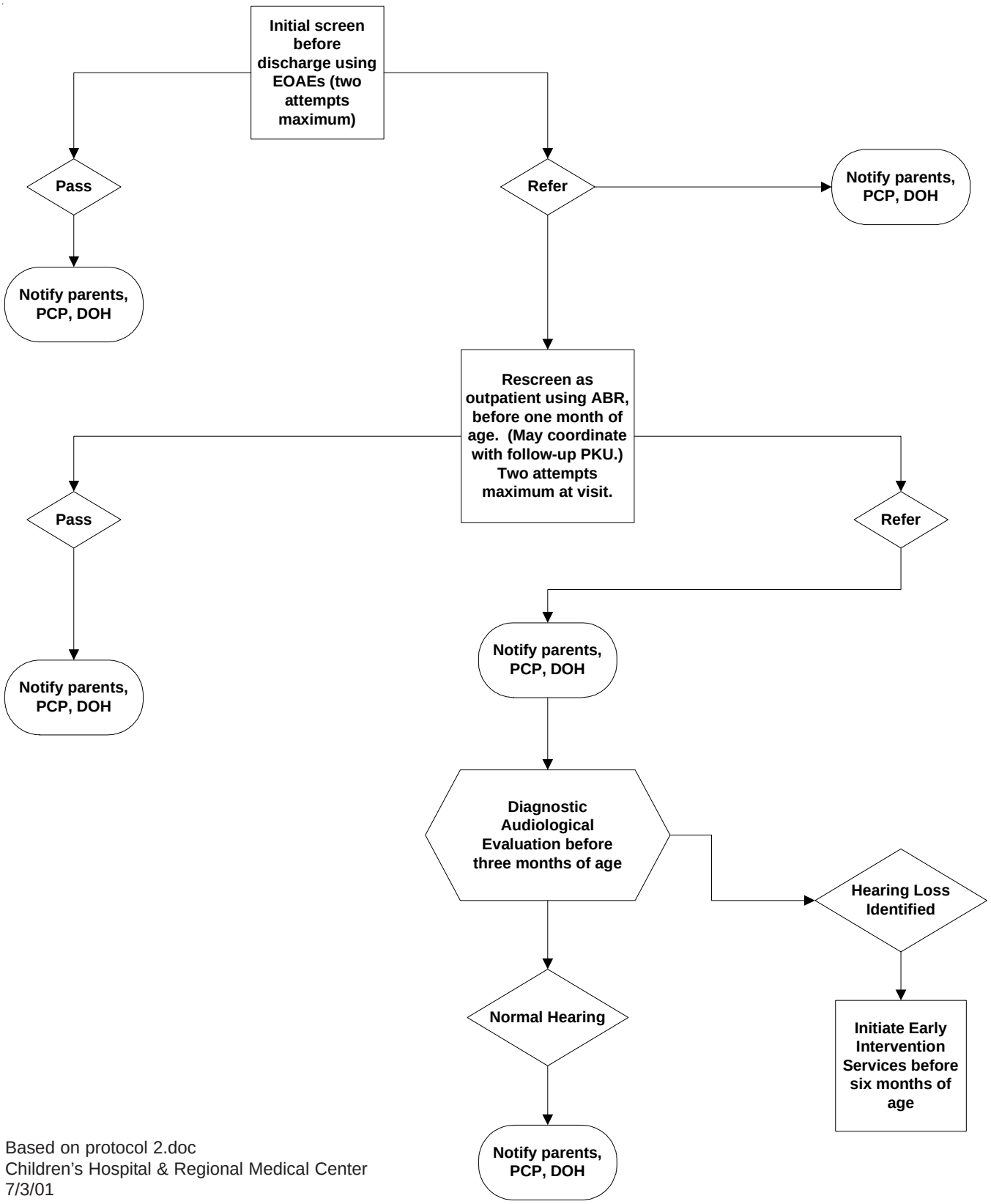
Washington State Department of Health

Screening Protocol No. One



Based on protocol 1.doc
Children's Hospital & Regional Medical Center
7/3/01

Screening Protocol No. Two



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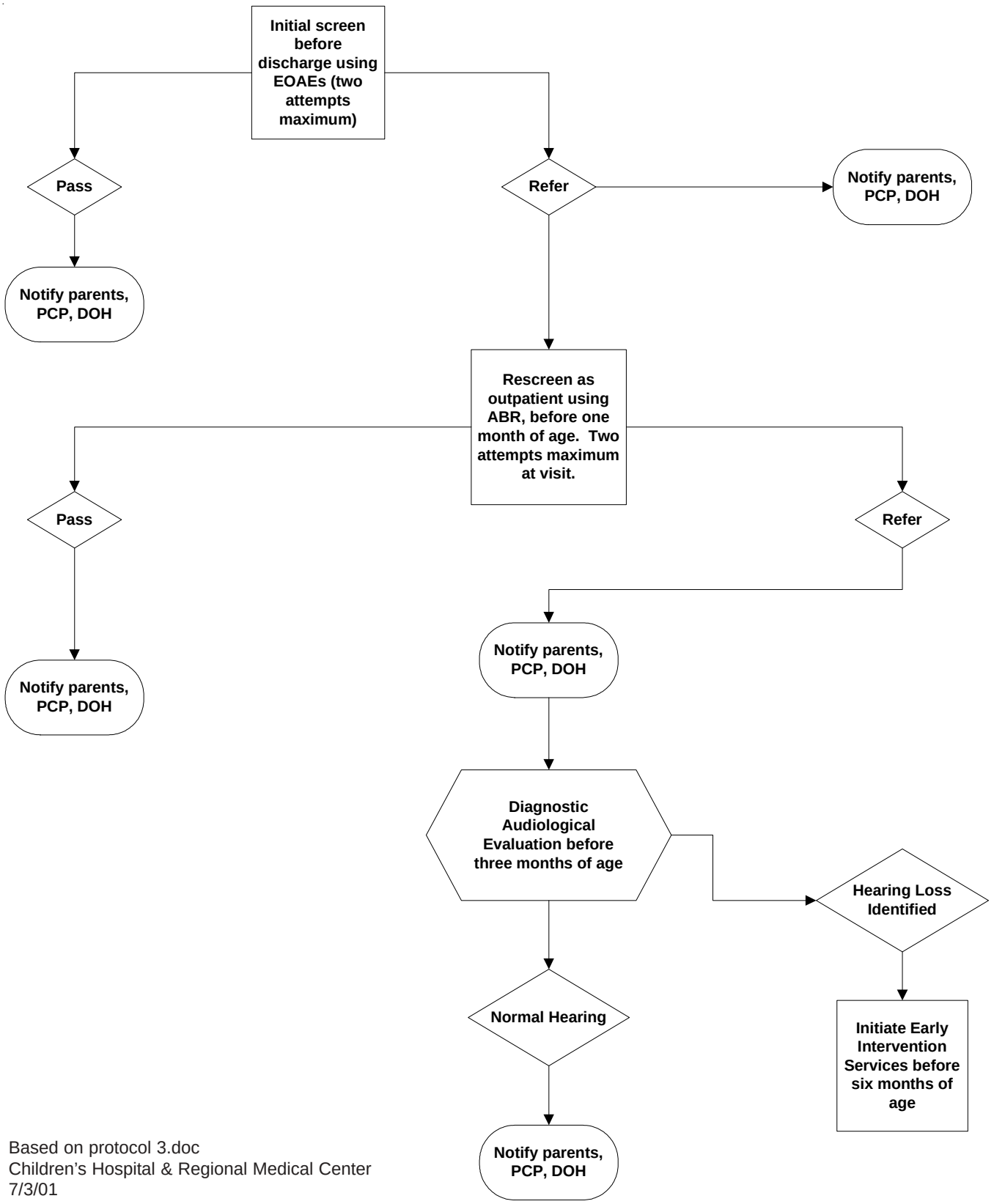
Screening Protocol No. Three



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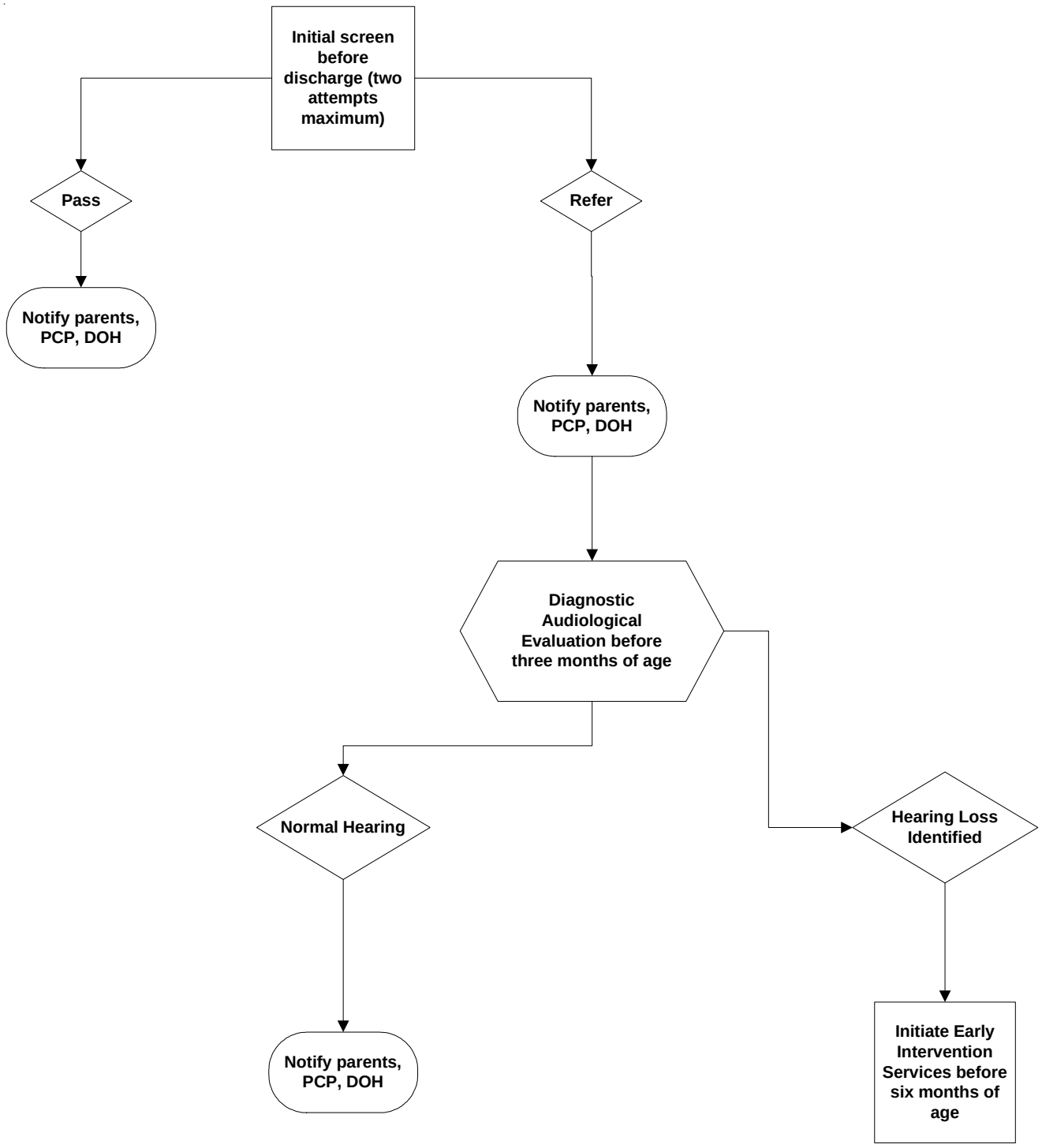
Screening Protocol No. Four



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